

LITHOGRAPHY TOOL TEST PATTERNS AND METHOD

Abstract

Test patterns and a method for evaluating and adjusting the resolution of an electron beam lithography tool. The test patterns include multiple feature patterns that are repeated throughout the test pattern. Each feature pattern can be interleaved with horizontal and/or vertical line patterns that facilitate cleaving of a test substrate for three dimensional analysis of the developed image. Further, each feature pattern can comprise multiple sub-patterns. Each sub-pattern includes at least one feature having a size that varies from less than a nominal resolution limit of the lithography tool to greater than the nominal resolution limit. The lithography tool resolution can be evaluated by exposing a test pattern on a resist coated substrate, and analyzing the developed image.